Melville City
Climate Action Network Inc.
ABN 79 625 494 837

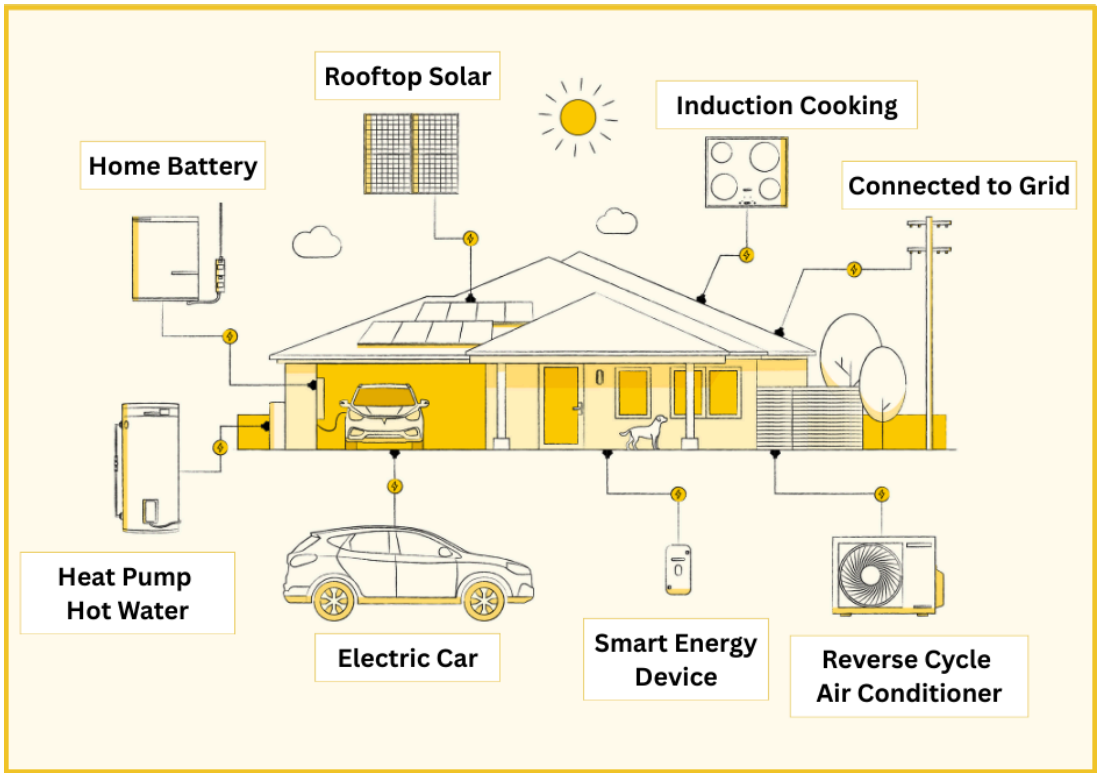
FACT SHEET

All-Electric Home is more Sustainable

Introduction

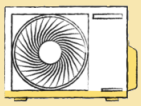
Living more sustainably means reducing your carbon footprint and acting in an environmentally and socially responsible manner. It encourages everyone to minimise their use of the earth's resources and reduce environmental damage due to human interactions.

Choosing an all-electric home is a more sustainable way of living is better for your health, pocket and the planet. Helping our community move towards a safe and clean energy future. The City of Melville aims to reduce community greenhouse emissions to net zero by 2050.



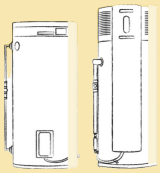
Prioritise the Six Decisions to be All-Electric

Space Heating & Cooling



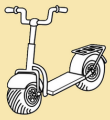
Reverse cycle air-conditioners are considered the cheapest, most energy efficient, lowest emissions heating and cooling option. 3 to 4 times more efficient than gas heaters, and standard electric resistance heaters, such as oil-column heaters/fan heaters/radiant-electric panel heaters.

Hot water



Heating hot water is one of the biggest energy users in the home. 20%-30% of household energy use. It can reduce gas consumption significantly and can act as a 'thermal battery'. This means you can choose when to put energy into it and time it to use your solar power. To keep costs under control and save energy it is good to install an efficient electric heat pump hot water system.

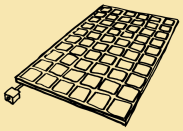
Electric vehicles



The average Aussie home has 1.8 cars parked in their driveway and spends up to $2700 every year filling them up. Our private cars are responsible for 16% of Australia's domestic emissions. Your first option could be to use active and public transport, an electric bike or scooter. But when you need a car, make it electric. This is the single biggest impact your household can make from both a bill savings and emissions savings.

EVs are cleaner, healthier, cheaper to run and their ability to work as giant storage batteries will play an exciting role in our energy future. You can simply charge via a regular power point at home or make use of public charging stations.

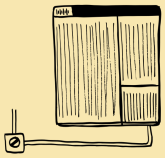
Rooftop Solar



The cheapest form of delivered energy available in the world is Australia's rooftop solar. The day you start powering your home's energy needs from your rooftop solar is the day you will save money on your energy bills.

Most suburban households install 6-10kW of solar (15-28 panels), a good balance between cost, average household consumption and results in producing energy at $0.05 KWh

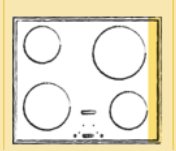
Home Battery



Unfortunately, as Solar panels can charge up a home battery while the sun shines. Then the battery can help power your home through the evening (You're still connected to the grid for cloudy days when you need more energy).

Used in conjunction with the Synergy Midday Saver Tariff of $0.08/kWh from 9am-3pm a battery reduces energy costs even without solar panels.

Cooktop

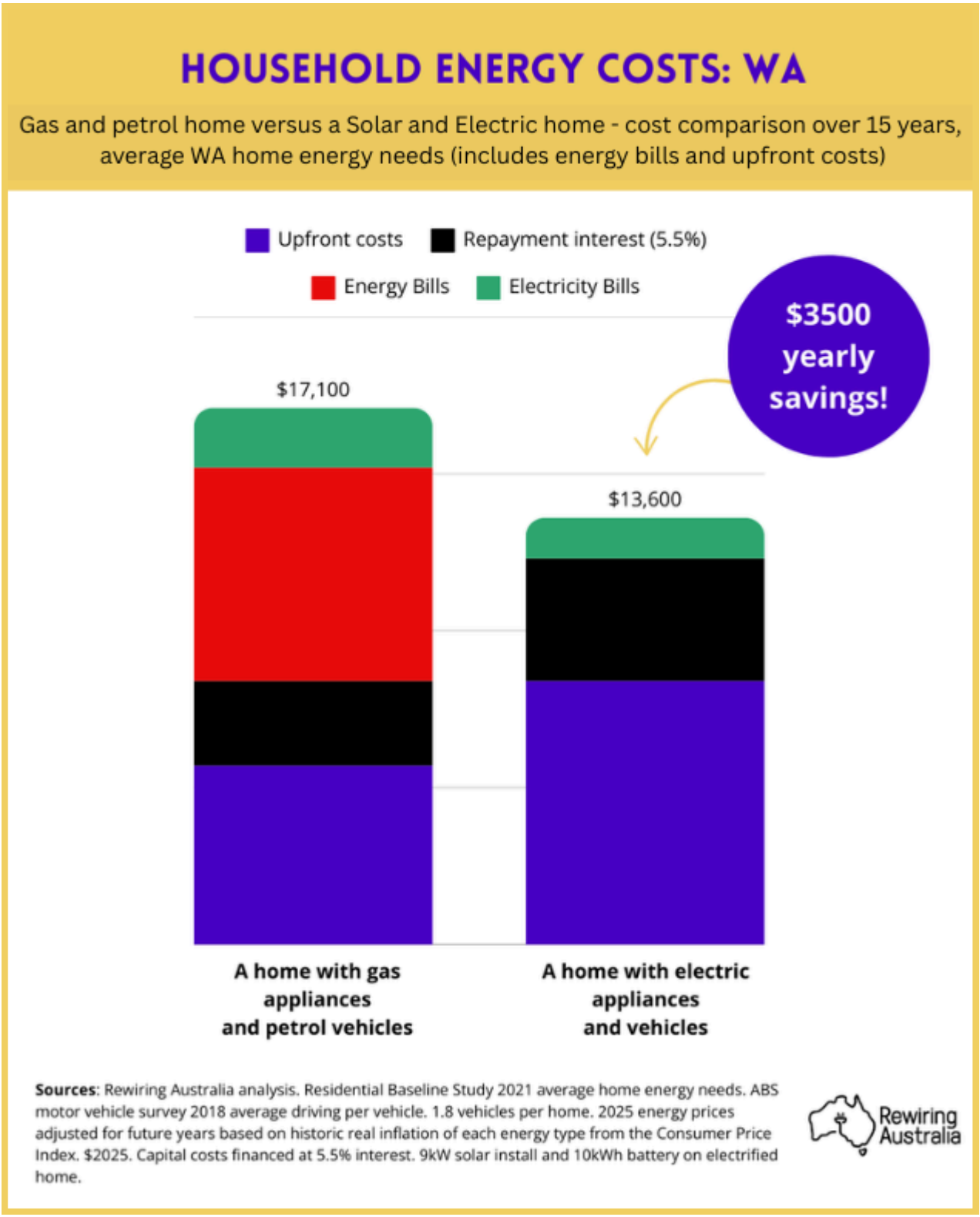


One of the three main appliances that uses gas in a home - alongside water heaters and space heaters. While it's the smallest of the three gas users, it has the most direct impact on our health. Electric induction cooktops are more efficient, safer, cleaner and faster than cooking with gas or an electric resistance cooktop. Once cooktop, hot water and space heaters are all-electric, disconnect gas and save by having no gas supply charge and gas account fee.

Other things to consider

- An all-electric home has no gas appliances and is more sustainable and cheaper to run.
- Understand your energy bills and how much energy your home and appliances consume. How much energy (gas and electricity) and water you consume daily? (it is usually stated on your bills).
- How much energy does each appliance in your home use? This will be in the manuals or can be found with the make and model number online. When replacing them, it is cheaper over time to purchase the most energy efficient ones available. Use the most energy efficient appliances such as air fryers instead of the oven, slow cookers and microwave ovens.
- Turn appliances off when not in use. If you have solar run them when the sun is shining. Fridges and freezers run for 24hrs; 365 days of the year so try to live with smaller energy efficient units in your home.
- In summer, try to keep the sun out of your home. Use blinds, awnings and shade cloth outside. Inside use shutters, honeycomb blinds and block out curtains . On cooler nights open windows and doors to allow cross airflow and to cool the inside, close them all before it heats up outside.
- In the cooler months, let the sun in to warm your home during the day. Close all blinds and curtains to retain the heat at night.
- Seal up gaps around doors and windows. Seal up open ceiling vents. Fit dampers (non-return flaps) to exhaust fans from bathrooms etc. Evaporative air conditioning vents need to be closed and outside units fitted with a cover in winter.
- Set air conditioning to 19°C in winter and 24°C in summer. Only heat or cool the rooms you use.
- Consider Improving the insulation in your roof space, the cavity walls, under floors, installing double glazed windows and doors, upgrading your old reverse cycle air-conditioning (new units consume 30-40% less energy.
- How many km do you drive annually? How much did you spend last year on fuel? What is your cars fuel consumption (litres/100km)?
- Water in Perth is expensive because it comes mostly from de-salination plants. These consume huge amounts of energy, so use it sparingly.
- Hot water is cheaper from an air source heat pump. However, it is still good to minimise its use, for example by taking shorter showers.
- Try to have less waste, plan your meals to minimise food waste and only buy what you need. Use the FOGO bin (food waste in your red bin goes to landfill and creates methane emissions). Follow the council waste instructions and recycle where you can, remember some plastics and polystyrene are hazardous waste. These and other special waste can be collected and delivered to the council drop off on specially announced dates.
- Plastics are made from oil-based chemicals, so it is best to try not to use any.

Average Household Savings are $3,500 per year!



Melville City Climate Action Network Inc.
is a grass-roots, non-profit, non-partisan, community organisation promoting actions to achieve reductions in greenhouse gas emissions.
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